

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-014753**Date Inspected:** 11-Jun-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Gao Zhi Chun
Inspected CWI report: Yes No N/A
Electrode to specification: Yes No N/A
Qualified Welders: Yes No N/A
Approved Drawings: Yes No N/A

CWI Present: Yes No
Rod Oven in Use: Yes No N/A
Weld Procedures Followed: Yes No N/A
Verified Joint Fit-up: Yes No N/A
Approved WPS: Yes No N/A
Delayed / Cancelled: Yes No N/A

Bridge No: 34-0006**Component:** Tower Components**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

BAY#10

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint # 1A located on Lift-5 Splice Plate Stiffener SSD1 – SPSA5 – 6. Welder is identified as 050266.

ZPMC Quality Control (QC) Inspector is identified as Yu Zhi Lai. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – Tc – U5b – 1.

Weld joint # 2A located on Lift-5 Splice Plate Stiffener NSD1 – SPSA5 – 16. Welder is identified as 057258.

ZPMC Quality Control (QC) Inspector is identified as Yu Zhi Lai. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – Tc – U5b – 1.

BAY#11

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 005951

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Ultrasonic Testing (UT)

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member is identified as Tower Component. The weld designations reviewed are as follows:

TOWER STRUT – GREEN TAG#12599

ED1 – STSA4 – 6 – 131M – 73A/B; 74A/B; 5A/B; 6A/B

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint # 34B located on Lift – 5 west tower A/E corner to Grillage plate WSD1 – TL5 – 4B/F. Welder is identified as 049704. ZPMC Quality Control (QC) Inspector is identified as Xu Jin Long. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3213 – B – U3b.

(See attached photo)

Weld joint # 34A located on Lift – 5 west tower A/E corner to Grillage plate WSD1 – TL5 – 4B/F. Welder is identified as 040619. ZPMC Quality Control (QC) Inspector is identified as Xu Jin Long. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3213 – B – U3b.

MEASUREMENTS ON TOWER STRUTS

This QA Inspector carried out the measurements on Tower Struts to check the length, flange to flange distance, stiffener to stiffener distance, bolt hole to edge of the strut distance and 1:1 fillet weld termination & 10mm minimum clearance from fillet to CJP at stiffeners. Measurements were recorded on the data sheet and submitted to the assigned task leader. The identified component designations reviewed are as follows

TOWER STRUTS

1. ED1 – STSA4 – 6 – 131M – 2
2. WD1 – A6001 – 4
3. WD1 – A6001 – 3
4. SD1 – A6002 – 3
5. SD1 – A6002 – 8
6. WD1 – A6001 – 7
7. SD1 – A6002 – 8
8. WD1 – A6003 – 4

BAY#16

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 005957

Visual Inspection Testing (VT)

This QA inspector performed VT of the area previously tested and accepted by ZPMC Quality Control personnel. The member is identified as Tower Component. The identified component and weld designations reviewed are as follows:

TOWER FAÇADE MANHOLE HINGE

HWSAW1 – 18M(E) – 1 – 1~4

HWSAW1 – 18M(E) – 2 – 1~4

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HWSAW1 – 18M(E) – 3 – 1~4
HWSAW1 – 28M(E) – 1 – 1~4
HWSAW1 – 28M(E) – 2 – 1~4
HWSAW1 – 28M(E) – 3 – 1~4

Magnetic Particle Testing (MT)

This QA inspector performed MT of the area previously tested and accepted by ZPMC Quality Control personnel.

This QA Inspector generated an MT report for this date. The member is identified as Tower Component. The weld designation reviewed as follows:

TOWER FAÇADE MANHOLE HINGE – GREEN TAG#12600

HWSAW1 – 18M(E) – 1 – 1~4
HWSAW1 – 18M(E) – 2 – 1~4
HWSAW1 – 18M(E) – 3 – 1~4
HWSAW1 – 28M(E) – 1 – 1~4
HWSAW1 – 28M(E) – 2 – 1~4
HWSAW1 – 28M(E) – 3 – 1~4

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

No Relevant Conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Michael Ng - 15921845703, who represents the Office of Structural Materials for your project.

Inspected By: Kumar,Sandeep

Quality Assurance Inspector

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Reviewed By: Clifford, William

QA Reviewer